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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,294	04/19/2004	Naoko Ito	8046-1017-1	1316

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EXAMINER	
GORTAYO, DANGELINO N	

ART UNIT	PAPER NUMBER
2168	

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/826,294	ITO ET AL.	
	Examiner	Art Unit	
	Dangelino N. Gortayo	2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-30,47-59 and 61* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-30,47-59 and 61* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :4/19/04, 5/28/04, and 11/09/04 .

DETAILED ACTION

1. Claims 17-30, 47-59, 61 are pending for examination.

2. The updated claims filed 4/19/2004 have been accepted for examination.

Information Disclosure Statement

3. Initialed and dated copies of Applicant's IDS forms 1449, filed 4/19/2004, 5/28/2004, and 11/09/2004 are attached to the instant Office action.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claim 17 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. For an invention to be statutory, an invention must disclose a "useful, tangible, and concrete result". The claimed invention as a whole must be useful and accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96 (1966)); In re Fisher, 421 F.3d 1365, 76 USPQ2d 1225 (Fed. Cir. 2005); In re Ziegler, 992 F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)).

Claim 17 recites the limitation "an update manager for managing an update of the structured document using an updated minimum element of the structured document, the updated minimum element including an updated portion of the structured document". The claim fails to produce a useful, concrete, or tangible result. Rather, an update manager uses the updated minimum element to manage updates, without providing a concrete, useful, and tangible result to the user of the invention. There is no following step that shows a result of the managing of updated data. Therefore the claim is rendered non-statutory. Proper correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 17-30, 47-59, 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodnar et al. (US Patent 6,295,541 B1) in view of Benson et al. (US Patent 6,202,085 B1)

As per claim 17, Bodnar teaches "A structured document processing system" (see Abstract) "comprising a network composed of a server device and a plurality of

client devices," (Figure 2 and column 10 lines 23-63, wherein clients are shown in communication with a synchronizer in a main PC) "the server device storing a structured document composed of a plurality of elements which are hierarchically structured," (Figure 2 reference 32, 37, and column 11 lines 26-49, wherein a Synchronizer dataset stores the most up-to-date data for a document) "each of the elements being a constituent unit of the structured document," (Figure 5C and column 20 lines 24-38, wherein each element of a document is mapped and tracked by the Synchronizer)

"the server device comprising: an update manager for managing an update of the structured document using an updated minimum element of the structured document, the updated minimum element including an updated portion of the structured document." (Figures 5B, 5C and column 19 line 55 – column 20 line 21, wherein a record file is mapped individually)

Bodnar does not teach "each of the client devices storing a duplication of the structured document". Benson teaches "each of the client devices storing a duplication of the structured document" (column 13 lines 31-56, wherein a local copy of a document is stored by a data replication system). It would have been obvious at the time of the invention for one of ordinary skill in the art to combine Bodnar's system to synchronize data between a synchronizer server and clients with Benson's method of synchronizing exact copies of data from sources to synchronizing clients. This would give the user the advantage of improving access time and performance by being more exact with the changes to the document, speeding up synchronization. The motivation for doing so would be to provide a generalized synchronization model. (column 3 lines 39-48)

As per claim 18, Bodnar teaches "the server device further comprises a transmission section, the update manager instructing the transmission section to transmit an updated minimum element of the structured document to a client device when the structured document has been updated. (Figure 9A reference 910 and column 11-37, wherein client accessors provide communication with clients and are directed by a synchronizer core to transmit data at updating).

As per claim 19, Bodnar teaches "the server device further comprises a transmission section, the update manager instructing the transmission section to transmit update information to a client device when the structured document has been updated, the update information including identification information identifying an updated minimum element of the structured document" (Figure 9A reference 910, Figure 10A reference 1002, and column 11-37, wherein client accessors provide communication with clients and are directed by a synchronizer core to transmit data at updating as identified by records).

As per claim 20, Bodnar teaches "the update manager manages the update of the structured document using an update time at which the update of the structured document occurs, wherein, when an update occurs at the node, the update manager instructing the transmission section to transmit update information to a client device, the update information including the update time." (Figure 10B, 10C, and column 41 lines 33-56)

As per claim 21, Bodnar teaches "when a client device receives the update information from the server device, the client device updates the structured document stored therein based on the update information received. " (column 42 lines 41-58)

As per claim 22, Bodnar teaches "each of the client devices comprises: a comparator for comparing the update time of the update information received is later than an updated time of the structured document currently stored therein;" (Figure 7C and column 25 lines 12-35)

"and a transmission controller for requesting transfer of an updated minimum element of the structured document when the update time of the update information received is later than the updated time of the structured document currently stored therein." (column 42 lines 42-55)

As per claim 23, Bodnar teaches "the update manager transmits an updated minimum element of the structured document to a client device at a plurality of predetermined times." (Figure 10C reference 1019 and column 40 lines 45-53)

As per claim 24, Bodnar teaches "the update manager transmits update information to the client device at a plurality of predetermined times, the update information including identification information identifying an updated minimum element of the structured document." (Figure 10C, column 40 lines 13-53)

As per claim 25, Bodnar teaches "the update manager manages the update of the structured document using an update time at which the update of the structured document occurs, the update information further includes the update time." (Figure 10B, column 39 lines 46-67)

As per claim 26, Benson teaches "a gateway server device performing protocol processing between the server device and each of the client devices," (Figure 2 reference 34 and column 10 lines 35-53)

"wherein the server device transmits update information indicating that the structured document is updated to the gateway server device," (column 11 lines 5-18)

"wherein the gateway server device comprises: an structured document manager for managing the duplication of the structured document stored in the client device;" (Figure 2 reference 34 and column 13 line 57 – column 15 line 11)

"an update information receiver for receiving update information from the server device;" (column 14 lines 13-36)

"and an update controller for transmitting the update information received from the server device to the client device." (column 15 lines 1-11)

As per claim 27, Bodnar teaches "the update controller transmits the update information received from the server device to the client device at a plurality of predetermined times." (Figure 10C, column 40 lines 13-53)

As per claim 28, Benson teaches "when a client device receives the update information from the gateway server device, the client device updates the duplication of the structured document stored therein based on the update information received." (column 11 lines 5-18)

As per claim 29, Bodnar teaches "each of the client devices comprises: a comparator for comparing the update time of the update information received is later

than an updated time of the structured document currently stored therein;" (Figure 7C and column 25 lines 12-35)

"and a transmission controller for requesting transfer of an updated minimum element of the structured document when the update time of the update information received is later than the updated time of the structured document currently stored therein." (column 42 lines 42-55)

As per claim 30, Benson teaches "a gateway server device performing protocol processing between the server device and each of the client devices," (Figure 2 reference 34 and column 10 lines 35-53)

"wherein the server device transmits update information including an update time and the updated minimum element to the gateway server device," (column 13 lines 57-65)

"wherein the gateway server device comprises: an structured document storage for storing the duplication of the structured document stored in the client device;" (Figure 2 reference 68 and column 12 lines 52-67)

"an structured document manager for managing the duplication of the structured document for the client device and an update time thereof;" (Figure 2 reference 34 and column 13 line 57 – column 15 line 11)

"an update information receiver for receiving the update information from the server device; and an update controller for transmitting the updated minimum element of the structured document to a client device having the update time of the structured

document stored therein, which is later than the update time included in the update information received from the server device." (column 14 lines 13-36)

As per claim 47, Bodnar teaches "A structured document updating method" (see Abstract) "in a network composed of a server device and a plurality of client devices," (Figure 2 and column 10 lines 23-63, wherein clients are shown in communication with a synchronizer in a main PC) "the server device storing a structured document composed of a plurality of elements which are hierarchically structured," (Figure 2 reference 32, 37, and column 11 lines 26-49, wherein a Synchronizer dataset stores the most up-to-date data for a document) "each of the elements being a constituent unit of the structured document," (Figure 5C and column 20 lines 24-38, wherein each element of a document is mapped and tracked by the Synchronizer)

"the method comprising the steps of: at the server device, a) managing an update of the structured document using an updated minimum element of the structured document, the updated minimum element including an updated portion of the structured document;" (Figures 5B, 5C and column 19 line 55 – column 20 line 21, wherein a record file is mapped individually)

"and b) notifying the client devices on the network that the structured document is updated when a part of the structured document has been changed." (column 37 line 54 – column 38 line 14, wherein synchronization support module notifies client of updated data)

Bodnar does not disclose "each of the client devices storing a duplication of the structured document". Benson teaches "each of the client devices storing a duplication of the structured document," (column 13 lines 31-56, wherein a local copy of a document is stored by a data replication system). It would have been obvious at the time of the invention for one of ordinary skill in the art to combine Bodnar's system to synchronize data between a synchronizer server and clients with Benson's method of synchronizing exact copies of data from sources to synchronizing clients. This would give the user the advantage of improving access time and performance by being more exact with the changes to the document, speeding up synchronization. The motivation for doing so would be to provide a generalized synchronization model. (column 3 lines 39-48)

As per claim 48, Bodnar teaches "at a client device receiving an updated minimum element of the structured document from the server device, c) updating a corresponding minimum element of the structured document stored therein using the updated minimum element received." (Figure 9A reference 910 and column 11-37, wherein client accessors provide communication with clients and are directed by a synchronizer core to transmit data at updating).

As per claim 49, Bodnar teaches "in the step (a), the update of the information is managed using an update time at which the update of the information occurs, wherein the step (b) comprises the step of: transmitting update information to the client devices, the update information including the update time." (Figure 10B, 10C, and column 41 lines 33-56)

As per claim 50, Bodnar teaches "at a client device receiving the update information from the server device, c) updating the information stored therein based on the update information received." (column 42 lines 41-58)

As per claim 51, Bodnar teaches "the step (c) comprises the steps of: determining whether the update time of the update information received is later than an updated time of the structured document currently stored therein;" (Figure 7C and column 25 lines 12-35)

"and when the update time of the update information received is later than an updated time of the structured document currently stored therein, requesting transfer of an updated minimum element of the structured document." (column 42 lines 42-55)

As per claim 52, Bodnar teaches "an updated minimum unit of the structured document is transmitted to the client devices at a plurality of predetermined times." (Figure 10C reference 1019 and column 40 lines 45-53)

As per claim 53, Bodnar teaches "update information is transmitted to the client devices at a plurality of predetermined times, the update information including identification information identifying an updated minimum unit of the structured document." (Figure 10C, column 40 lines 13-53)

As per claim 54, Bodnar teaches "the update of the information is managed using an update time at which the update of the structured document occurs, the update information further includes the update time." (Figure 10B, column 39 lines 46-67)

As per claim 55, Benson teaches "the network further comprises a gateway server device performing protocol processing between the server device and each of the client devices," (Figure 2 reference 34 and column 10 lines 35-53)

"the method further comprising the steps of: at the gateway server device, c) managing the structured document stored in each of the client devices;" (Figure 2 reference 34 and column 13 line 57 – column 15 line 11)

"d) receiving an update information from the server device;" (column 11 lines 5-18)

"and e) transmitting the update information received from the server device to a client device." (column 15 lines 1-11)

As per claim 56, Bodnar teaches "in the step (e), the update information received from the server device is transmitted to the client device at a plurality of predetermined times." (Figure 10C, column 40 lines 13-53)

As per claim 57, Benson teaches "at the client device receiving the update information from the gateway server device, updating the structured document stored therein based on the update information received." (column 11 lines 5-18)

As per claim 58, Bodnar teaches "at the client device, determining whether the update time of the update information received is later than an updated time of the structured document currently stored therein;" (Figure 7C and column 25 lines 12-35)

"and when the update time of the update information received is later than an updated time of the structured document currently stored therein, using the identification

information to request transfer of an updated minimum unit of the structured document from the gateway server device." (column 42 lines 42-55)

As per claim 59, Benson teaches "the network further comprises a gateway server device performing protocol processing between the server device and each of the client devices," (Figure 2 reference 34 and column 10 lines 35-53)

"the method further comprising the steps of: at the gateway server device, storing the structured document stored in each of the client devices in an information storage;" (Figure 2 reference 68 and column 12 lines 52-67)

"managing the structured document for each of the client devices and an update time thereof;" (Figure 2 reference 34 and column 13 line 57 – column 15 line 11)

"receiving an update information from the server device at which an update of the structured document occurs;" (column 14 lines 13-36)

"selecting a client device having the update time of the structured document stored therein, which is later than the update time included in the update information received from the server device;" (column 13 line 57 – column 15 line 11)

"and transmitting the updated minimum unit of the structured document identified by the identification information included in the update information received from the server device, to the selected client device." (column 14 lines 13-36)

As per claim 61, Bodnar teaches "A storage medium storing a computer program for updating a structured document in a network" (see Abstract) "composed of a server device and a plurality of client devices," (Figure 2 and column 10 lines 23-63,

wherein clients are shown in communication with a synchronizer in a main PC) "the server device storing a structured document composed of a plurality of elements which are hierarchically structured," (Figure 2 reference 32, 37, and column 11 lines 26-49, wherein a Synchronizer dataset stores the most up-to-date data for a document) "each of the elements being a constituent unit of the structured document," (Figure 5C and column 20 lines 24-38, wherein each element of a document is mapped and tracked by the Synchronizer)

"the computer program at the server device comprising the steps of: a) managing an update of the structured document using an updated minimum element of the structured document, the updated minimum element including an updated portion of the structured document;" (Figures 5B, 5C and column 19 line 55 – column 20 line 21, wherein a record file is mapped individually)

"and b) notifying the client devices on the network that the structured document is updated when a part of the structured document has been changed." (column 37 line 54 – column 38 line 14, wherein synchronization support module notifies client of updated data)

Bodnar does not teach "each of the client devices storing a duplication of the structured document". Benson teaches "each of the client devices storing a duplication of the structured document" (column 13 lines 31-56, wherein a local copy of a document is stored by a data replication system). It would have been obvious at the time of the invention for one of ordinary skill in the art to combine Bodnar's system to synchronize data between a synchronizer server and clients with Benson's method of synchronizing

exact copies of data from sources to synchronizing clients. This would give the user the advantage of improving access time and performance by being more exact with the changes to the document, speeding up synchronization. The motivation for doing so would be to provide a generalized synchronization model. (column 3 lines 39-48).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

LaRue et al. (US Patent 6,401,104 B1)

Vaduvur et al. (Us Patent 6,446,088 B1)

Beizer et al. (US Patent 6,240,414 B1)

Bauer et al. (US Patent 5,884,325)

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dangelino N. Gortayo whose telephone number is (571)272-7204. The examiner can normally be reached on M-F 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim T. Vo can be reached on (571)272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dangelino N. Gortayo
Examiner

Tim T. Vo
SPE

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